

FIVE ICHNEUMONIDÆ REARED FROM COCOONS
OF THE EUROPEAN PINE SAWFLY, NEO-
DIPRION SERTIFER (GEOFF.)

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The European pine sawfly *Neodiprion sertifer* (Geoff.) has been causing severe damage to red and Scotch pine in New Jersey since 1938.

In an attempt to control this pest the New Jersey Department of Agriculture has reared and liberated the parasitic chalcid *Microplectron fuscipennis* in large numbers during the period 1939-1945. The rearing technique employed is basically that previously employed in rearing the same parasite for use against the spruce sawfly in New England. The method was developed by the staff of the U. S. Department of Agriculture's Forest Insect Laboratory at New Haven, Conn.

The method requires that large numbers of healthy sawfly cocoons be collected from infested plantings and stored under refrigeration for use during the rearing period. A supply of such cocoons was collected in June 1944 from a stand of red pine near Kingston, Middlesex County, N. J.

During the winter of 1944-45 several hundred of these stored cocoons were placed in individual vials with ventilated stoppers and held in a chamber with a relative humidity of 60 per cent at 75° F.

Many healthy sawfly adults emerged from the cocoons, and five species of ichneumonids were also recovered and later identified as *Exenterus canadensis* (Prov.), *Mastrus neodiprioni* (Vier.), *Endasys subclavatus* (Say), *Agrothereutes lophyri* (Nort), and *Euceros neodiprioni* (Wally).